

**ORIGINAL**

1 KARL J. KRAMER (No. 136433)  
 JANA G. GOLD (No. 154246)  
 2 SHERMAN W. KAHN (No. 168924)  
 MORRISON & FOERSTER LLP  
 3 755 Page Mill Road  
 Palo Alto, California 94304-1018  
 4 Telephone: (415) 813-5600

5 RAOUL D. KENNEDY (No. 40892)  
 MORRISON & FOERSTER LLP  
 6 345 California Street  
 San Francisco, California 94104-2675  
 7 Telephone: (415) 677-7000

8 PATRICK J. FLINN (No. 104423)  
 ALSTON & BIRD  
 9 One Atlantic Center  
 1201 W. Peachtree Street  
 10 Atlanta, Georgia 30306  
 Telephone: (404) 881-7000

11 Attorneys for Defendants/Counter-  
 12 Claimants CYLINK, CARO-KANN CORPORATION  
 AND THE BOARD OF TRUSTEES OF THE  
 13 LELAND STANFORD JUNIOR UNIVERSITY

14 UNITED STATES DISTRICT COURT  
 15 NORTHERN DISTRICT OF CALIFORNIA

16 ROGER SCHLAFLY,  
 17 Plaintiff,  
 18  
 19 v.  
 20 PUBLIC KEY PARTNERS AND RSA DATA  
 SECURITY, INC.,  
 21 Defendants,

22 RSA DATA SECURITY, INC.,  
 23 Plaintiff,  
 24  
 25 v.  
 26 CYLINK CORPORATION and CARO-KANN  
 CORPORATION, et al.  
 27 Defendants.

28 MARKMAN HEARING BRIEF OF STANFORD, CYLINK AND  
 CARO-KANN AND MEMORANDUM RE: "STEP FOR" CLAIMS  
 C-94-20512 SW/C-96-20094 SW

**FILED**

SEP 24 1996

RICHARD W. WIEKING  
 CLERK, U.S. DISTRICT COURT  
 NORTHERN DISTRICT OF CALIFORNIA  
 SAN JOSE

No. C-94-20512 SW

MARKMAN HEARING BRIEF  
 OF STANFORD UNIVERSITY,  
 CYLINK AND CARO-KANN AND  
 MEMORANDUM REGARDING  
 RSADSI'S ATTEMPT TO READ  
 METHOD CLAIMS AS "STEP FOR"  
 CLAIMS

No. ~~C-96-20094~~ SW

Date: October 1, 1996

Time: 10:00 a.m.

Judge: Hon. Spencer Williams

130850

## TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION .....	1
I. CLAIM INTERPRETATION IS A QUESTION OF LAW FOR THE COURT TO DECIDE BASED PRIMARILY ON THE WORDS OF THE CLAIMS, THE PATENT SPECIFICATION AND FILE HISTORY. ....	4
A. Intrinsic Evidence Is The Most Significant Evidence For Defining The Meaning Of Patent Claim Terms. ....	5
B. Extrinsic Evidence May Be Consulted But Cannot Contradict Or Vary The Meaning Of Terms As Expressed In The Intrinsic Evidence In The Public Record. ....	8
C. Determinations of Patent Validity and Equivalents Are Not Properly At Issue In The <u>Markman</u> Hearing. ....	10
II. CLAIMS 1 THROUGH 5 OF THE HELLMAN/MERKLE PATENT ARE ORDINARY METHOD CLAIMS, NOT STEP PLUS FUNCTION CLAIMS. ....	11
A. Section 112 Does Not Apply To Claim Elements Unless The Evidence Demonstrates That They Were Intended To Be Expressed As A "Step For" Performing A Function. ....	12
B. None of The Method Claims Of The Hellman-Merkle Patent Contain "Step For" Claim Elements. ....	14
III. CONCLUSION. ....	22

## TABLE OF AUTHORITIES

## CASES

<u>Arrhythmia Research Technology, Inc. v. Corazonix Corp.,</u>	
958 F.2d 1053 (Fed. Cir. 1992)	18,19,20
<u>Bio-Technology General Corp. v. Genentech,</u>	
80 F.3d 1553 (Fed. Cir. 1996)	18
<u>D.M.I., Inc. v. Deere &amp; Co.,</u>	
755 F.2d 1570 (Fed. Cir. 1985)	16
<u>Electro Medical System, S.A. v. Cooper Life Sciences,</u>	
34 F.3d 1048 (Fed. Cir. 1994)	6
<u>Exxon Chemical Patents Inc. v. Lubrizol Corp.,</u>	
64 F.3d 1553 (Fed. Cir. 1995)	8
<u>Fromson v. Advance Offset Plate, Inc.,</u>	
720 F.2d 1565 (Fed. Cir. 1983)	21
<u>Genentech, Inc. v. Wellcome Foundation Ltd.,</u>	
29 F.3d 1555 (Fed. Cir. 1994)	18
<u>General Foods Corp. v. Studiengesellschaft Kohle mbH,</u>	
972 F.2d 1272 (Fed. Cir. 1992)	4
<u>Greenberg v. Ethicon Endo-Surgery, Inc.,</u>	
91 F.3d 1580, 39 U.S.P.Q. 2d 1783,	
1996 U.S. App. LEXIS 20109 (Fed. Cir. 1996)	12,13,14,15
<u>Halliburton Oil Well Cementing Co. v. Walker,</u>	
329 U.S. 1, 67 S. Ct. 6 (1946)	12
<u>Hilton Davis Chemical Co. v Warner Jenkinson Co.,</u>	
62 F.3d 1512 (Fed. Cir. 1995)	10
<u>In re Donaldson,</u>	
16 F.3d 1189 (Fed. Cir. 1994)	17
<u>In re Paulsen,</u>	
30 F.3d 1475 (Fed. Cir. 1984)	6,7,10
<u>In re Van Geuns,</u>	
988 F.2d 1181 (Fed. Cir. 1993)	4
<u>Intel Corp. v. United States International Trade Commn,</u>	
946 F.2d 821 (Fed. Cir. 1991)	6
<u>Intervet America Inc. v. Kee-Vet Labs., Inc.,</u>	
887 F.2d 1050 (Fed. Cir. 1989)	19,20,21

1	<u>Laitram Corp. v. Cambridge Wire Cloth Co.,</u>	
2	863 F.2d 855 (Fed. Cir. 1988),	
	<u>cert. denied</u> , 490 U.S. 1068 (1989) .....	6
3	<u>Laitram Corp. v. NEC Corp.,</u>	
4	62 F.3d 1388 (Fed. Cir. 1995) .....	18
	<u>Lifescan, Inc. v. Home Diagnostics, Inc.,</u>	
5	76 F.3d 358 (Fed. Cir. 1996) .....	18,20
6	<u>Markman v. Westview Instruments, Inc.,</u>	
7	116 S. Ct. 1384 (1996) .....	4
	<u>Markman v. Westview Instruments, Inc.,</u>	
8	52 F.3d 967 (Fed. Cir. 1995),	
9	<u>aff'd</u> , 116 S. Ct. 1384 (1996) .....	passim
	<u>Moleculon Research Corp v. CBS, Inc.,</u>	
10	793 F.2d 1261 (Fed. Cir. 1986),	
11	<u>cert. denied</u> , 479 U.S. 1030 (1987) .....	19
	<u>Palumbo v. Don Joy Co.,</u>	
12	762 F.2d 969 (Fed. Cir. 1985) .....	10
13	<u>Polaroid Corp. v. Eastman Kodak Co.,</u>	
14	789 F.2d 1556 (Fed. Cir.),	
	<u>cert. denied</u> , 479 U.S. 850 (1986) .....	20
15	<u>Quantum Corp. v. Mountain Computer,</u>	
16	5 U.S.P.Q. 2d 1103 (N.D. Cal. 1987) .....	13,14
	<u>Shamrock Technologies, Inc. v. Medical Sterilization, Inc.,</u>	
17	903 F.2d 789 (Fed. Cir. 1990) .....	19
18	<u>Southwall Technologies, Inc. v. Cardinal IG Co.,</u>	
19	54 F.3d 1570 (Fed. Cir. 1995) .....	5
	<u>Uniroyal, Inc. v. Rudkin-Wiley Corp.,</u>	
20	837 F.2d 1044 (Fed. Cir.),	
21	<u>cert. denied</u> , 488 U.S. 825 (1988) .....	15
	<u>Vitronics Corp. v. Conceptronic, Inc.,</u>	
22	90 F.3d 1576 (Fed. Cir. 1996) .....	4,5,6,7,8,9

#### STATUTES

24	35 U.S.C. § 112, ¶ 6 .....	passim
----	----------------------------	--------

## 1 INTRODUCTION

2 This brief provides the legal standards to be applied at the  
3 claim interpretation hearing scheduled for October 1, 1996. This  
4 brief also addresses the attempt by RSA Data Security, Inc.  
5 ("RSADSI") and Mr. Schlafly to imply the words "step for" into the  
6 Method Claims of the Hellman-Merkle Patent. As shown below, there  
7 is no precedent for subjecting method claims to such a restriction.  
8 There are also no facts that support or even suggest that the  
9 inventors intended to apply 35 U.S.C. § 112, ¶ 6 to the method  
10 claims of the Hellman-Merkle Patent.

11 The claims of a patent measure the invention. If words are not  
12 in the claims, they may not be added by implication, through  
13 erroneous legal argument or under the guise of "expert testimony."  
14 The law requires that the Court determine the meaning of specific  
15 patent claim terms based upon the objective evidence in the public  
16 record, including the explicit terms as used in the claim, the  
17 patent specification, and patent prosecution history.

18 The Court may also rely upon other objective evidence available  
19 concerning the terms as used in the patent, including dictionary  
20 definitions and literature references, but only if such evidence  
21 does not contradict the terms as defined in the patent specification  
22 and prosecution history. As a last resort, expert and inventor  
23 testimony may be heard concerning the use of terms in the relevant  
24 field of art. However, such testimony cannot contradict the plain  
25 meaning of the claim terms as determined upon a review of the  
26 objective evidence from the public record.

27 At issue in this patent infringement action are the "Stanford  
28 Patents," United States Patent Nos. 4,220,770 (the "Diffie-Hellman

1 Patent") and 4,218,582 (the "Hellman-Merkle Patent"). Prior to the  
2 inventions of the Stanford Patents, both the sender and receiver of  
3 a coded message had to exchange secret keys to encode ("encipher")  
4 or decode ("decipher") messages. Exchange of such secret keys,  
5 whether by mail, messenger or other means, was always vulnerable to  
6 eavesdropping or interception. The struggle among opponents was to  
7 keep the keys secret at all costs. The Stanford inventions turned  
8 the old regime of cryptography literally on its head by designing  
9 cryptographic systems whereby the enciphering key and all of the  
10 information needed to encode a message are shared with anyone and  
11 everyone, including the enemy. The Stanford inventors thus  
12 eliminated the need to exchange secret keys over insecure channels.

13 In public-key cryptography, as disclosed in the Hellman-Merkle  
14 Patent, one of a pair of keys is made public for use by anyone  
15 wishing to send a secret message to the person associated with the  
16 public key. [Exh. 1] In Diffie-Hellman Key Agreement, as disclosed  
17 in the Diffie-Hellman Patent, two parties wishing to communicate a  
18 secret message share public information from which both can derive  
19 the same secret key. [Exh. 2] In both systems, the enemy is  
20 presumed to have all of the information that is communicated between  
21 the parties but the enemy cannot learn the content of the secret  
22 message. How that is accomplished will be discussed in great detail  
23 during the tutorial for the Court on September 30, 1996.

24 David Kahn, the preeminent historian of cryptography, describes  
25 the Stanford invention as "the most revolutionary new concept in the  
26 field since polyalphabetic substitution emerged in the Renaissance."  
27 [Exh. 5] In RSADSI's own words, the Stanford inventors "invented  
28 public-key cryptography" and the Stanford Patents contain "[t]he

1 basic ideas of public-key cryptography . . . ." [Exh. 6 (BSAFE  
 2 User's Manual, Version 2.1, at 44); Exh. 7 (RSADSI's Frequently  
 3 Asked Questions About Today's Cryptography, at 6)] The Diffie-  
 4 Hellman patent covers what has been called "Diffie-Hellman Public  
 5 Key Agreement." [Exh. 6, RSADSI's BSAFE User's Manual, Version 2.1,  
 6 at 52] As RSADSI admits, "Whitfield Diffie and Martin Hellman  
 7 invented this, the first true public-key algorithm, in 1976." [Id.]  
 8 RSADSI's CEO, Dr. James Bidzos, described Claim 1 of the Hellman-  
 9 Merkle Patent as having "very broad descriptions that apply to ANY  
 10 public-key cryptosystem." [Exh. 8 (November 13, 1991 Memo.)  
 11 (capitalization in original)] RSADSI's chief technical expert,  
 12 Dr. Ronald Rivest (the "R" in RSADSI), has acknowledged that "claims  
 13 1 to 6 would seem to cover the broad aspects of 'public key  
 14 cryptography' as it has become known in the literature." [Exh. 9  
 15 (August 10, 1983 Memo.)]

16 Despite these prior admissions, RSADSI is now attempting by  
 17 every possible means to insert or import limitations into the claims  
 18 that are simply not there. The claims measure the invention and may  
 19 not be altered by implying limitations from the patent  
 20 specification. Nor may the claims be limited by applying contorted  
 21 and crimped definitions that contradict the plain meaning of the  
 22 claim terms, the patent specification and well-understood  
 23 definitions set forth in dictionaries and literature from the  
 24 relevant field. The Stanford Patent claims were reviewed as written  
 25 by the United States Patent Office and issued as patentable  
 26 inventions. That the Patent Office granted broad claims in this  
 27 case is not surprising, given the pioneering status of the  
 28 invention. Of course RSADSI is free to argue at a later stage of



1 these proceedings that some -- or all -- of the claims in the  
2 Stanford Patents are invalid. But the issue now is claim  
3 interpretation, not patent validity. In interpreting the claims,  
4 the law does not permit the claims to be rewritten, no matter how  
5 great the temptation.

6 I. CLAIM INTERPRETATION IS A QUESTION OF LAW FOR THE  
7 COURT TO DECIDE BASED PRIMARILY ON THE WORDS OF THE  
8 CLAIMS, THE PATENT SPECIFICATION AND FILE HISTORY.

9 The claims of a patent define the bounds of a patented  
10 invention and are the measure by which patent infringement is  
11 determined. Markman v. Westview Instruments, Inc., 52 F.3d 967, 980  
12 (Fed. Cir. 1995) (en banc), aff'd, 116 S. Ct. 1384 (1996) (the  
13 function and purpose of claims is to delimit the right to exclude);  
14 In re Van Geuns, 988 F.2d 1181, 1184 (Fed. Cir. 1993) ("It is  
15 axiomatic that the claims define the invention which an applicant  
16 believes is patentable."); General Foods Corp. v.  
17 Studiengesellschaft Kohle mbH, 972 F.2d 1272, 1274 (Fed. Cir. 1992).  
18 The United States Supreme Court has conclusively held that the  
19 interpretation of patent claim terms is a question of law for the  
20 Court to decide. Markman v. Westview Instruments, Inc., 116 S. Ct.  
21 1384 (1996).

22 In determining the proper interpretation of a claim term, the  
23 court has numerous sources that it may properly utilize for guidance  
24 including both intrinsic and extrinsic evidence. Vitronics Corp. v.  
25 Conceptronic, Inc., 90 F.3d 1576 (Fed. Cir. 1996). When, after  
26 examining the intrinsic evidence, and any relevant extrinsic  
27 evidence, the court arrives at an understanding of the terms used in  
28 the patent claim, the court must then pronounce as a matter of law  
the meaning of those terms. Markman, 52 F.3d at 981.



**A. Intrinsic Evidence Is The Most Significant Evidence  
For Defining The Meaning Of Patent Claim Terms.**

A patent is a fully integrated written instrument. Markman, 52 F.3d at 978. Thus, the primary evidence used to determine the meaning of the terms of a patent claim is the evidence intrinsic to the patent -- the words of the claim itself, the patent specification and the prosecution history of the application leading to issuance of the patent. Vitronics Corp., 90 F.3d at 1582. "Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." Id. The intrinsic evidence controls the meaning of the terms in a patent claim because competitors should be able to understand the meaning and scope of the patent owner's rights by reference to the public record. Markman, 52 F.3d at 978-979.

The first step in interpreting patent claim terms is an analysis of the claim words. Vitronics Corp., 90 F.3d at 1582. Words in a claim are generally given their ordinary meaning. Id. The patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning so long as the special definition of the term is stated in the patent specification or the file history of the prosecution before the United States Patent Office. Id. A claim term must be given the same interpretation whenever it is employed in the claims -- the meaning of a claim term should not vary from claim element to claim element or from claim to claim. Southwall Technologies, Inc. v. Cardinal IG Co., 54 F.3d 1570, 1579 (Fed. Cir. 1995).

The second step in interpreting patent claim terms is a review of the specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning.

1 Vitronics Corp., 90 F.3d at 1582. The specification acts as a  
2 dictionary when it expressly defines terms used in the claims or  
3 when it defines terms by implication. Id. Usually, the  
4 specification is dispositive; it is the single best guide to the  
5 meaning of a disputed claim term that is defined in the  
6 specification. Vitronics Corp., 90 F.3d at 1582.

7       However, the written description in a patent specification does  
8 not delimit the right to exclude -- that is the function and purpose  
9 of claims. Markman, 52 F.3d at 979. The Court may not, under the  
10 guise of claim interpretation, read limitations from the  
11 specification into the claims. In re Paulsen, 30 F.3d 1475, 1480  
12 (Fed. Cir. 1984). In particular, references to a preferred  
13 embodiment in the patent specification are not limitations on the  
14 patent claims. Laitram Corp. v. Cambridge Wire Cloth Co., 863 F.2d  
15 855, 865 (Fed. Cir. 1988), cert. denied, 490 U.S. 1068 (1989).  
16 Where a specification does not explicitly require a claim  
17 limitation, such a limitation cannot be read into the claims.  
18 Electro Medical Sys., S.A. v. Cooper Life Sciences, 34 F.3d 1048,  
19 1054 (Fed. Cir. 1994) Similarly, a statement of a performance goal  
20 from the patent specification does not limit claim language. Intel  
21 Corp. v. United States Int'l Trade Comm'n, 946 F.2d 821, 836 (Fed.  
22 Cir. 1991).

23       In sum, the patent specification may be used as a dictionary to  
24 help define or assist in the interpretation of claim terms, but may  
25 not be used to alter or redefine the claimed invention by importing  
26 limitations from the specification into the claim. Aspects of the  
27 embodiments disclosed in the specification cannot be read into the  
28

1 claims, even if the claim as written would otherwise be invalid. In  
2 re Paulsen, 30 F.3d at 1480.

3 Finally, the Court may also consider as intrinsic evidence the  
4 prosecution history of the patent. Markman, 52 F.3d at 980. This  
5 record of proceedings in the Patent and Trademark Office, including  
6 any express representations made by the applicant regarding the  
7 scope of the claims may be of significance in understanding the  
8 claim terms. Vitronics Corp., 90 F.3d at 1582-1583. As with the  
9 patent specification, however, although the prosecution history can  
10 and should be used to understand the language used in the claims, it  
11 cannot enlarge, diminish or vary the terms in the claims. Markman,  
12 52 F.3d at 980.

13 In most situations, an analysis of the intrinsic evidence alone  
14 will resolve any ambiguity in a disputed claim term. Vitronics  
15 Corp., 90 F.3d at 1583. If the claim terms are clear upon a review  
16 of the intrinsic evidence, it is improper to resort to or rely upon  
17 extrinsic evidence. Id. The claims, specification and file  
18 history, rather than extrinsic evidence constitute the public record  
19 of the patentee's claim, a record on which the public is entitled to  
20 rely. Id. Allowing the public record to be altered or changed by  
21 extrinsic evidence such as expert testimony, would make this right  
22 meaningless. Id. As the Federal Circuit has explained:

23 [W]e are not free to read the claims as they  
24 might have been drafted, even if as drafted they  
25 do not accomplish what the inventor may have  
26 intended. . . . Claim drafting is itself an art,  
27 an art on which the entire patent system today  
28 depends. The language through which claims are  
expressed is not a nose of wax to be pushed and  
shoved into a form that pleases and that  
produces a particular result a court may desire.  
The public generally, and in particular, the  
patentee's competitors, are entitled to clear

and specific notice of what the patentee claims as his invention. That is not an easy assignment for those who draft claims, but the law requires it, and our duty demands that we enforce the requirement.

Exxon Chemical Patents Inc. v. Lubrizol Corp., 64 F.3d 1553, 1563 (Fed. Cir. 1995) (Plager J., concurring); see also Markman, 52 F.3d at 983 ("the extrinsic evidence of record cannot be relied on to change the meaning of the claims").

**B. Extrinsic Evidence May Be Consulted But Cannot Contradict Or Vary The Meaning Of Terms As Expressed in The Intrinsic Evidence In The Public Record.**

If after a review of the intrinsic evidence a claim term is still unclear to the Court, extrinsic evidence may be consulted. Extrinsic evidence consists of evidence external to the patent and prosecution history, including dictionaries, learned treatises, literature in the relevant field and, when necessary, expert and inventor testimony. Markman, 52 F.3d at 980. Such evidence may be helpful to explain scientific principles, the meaning of technical terms and terms of art that appear in the patent and prosecution history, and the state of the prior art at the time of the invention. Id.

The Court may, in its discretion, receive extrinsic evidence in order to aid the Court in coming to a correct conclusion as to the true meaning of the language employed in the patent. Id. Extrinsic evidence is to be used for the Court's understanding of the patent, not for the purpose of varying or contradicting the terms of the claims. Markman, 52 F.3d at 981. Extrinsic evidence cannot be used to vary or contradict definitions or usage of terms in the specification. Vitronics Corp., 90 F.3d at 1584. The Court's interpretation of claim terms, enlightened by such extrinsic

1 evidence as may be helpful, must nonetheless still be based on the  
2 patent and prosecution history. Markman, 52 F.3d at 981.

3 While technical treatises and dictionaries fall within the  
4 category of extrinsic evidence, unlike expert testimony, judges may  
5 consult such resources at any time in order to better understand the  
6 underlying technology. Vitronics Corp., 90 F.3d at 1584 n.6.

7 Judges may always consult and rely upon dictionary definitions when  
8 construing claim terms, so long as the dictionary definitions do not  
9 contradict any definition found in or ascertained by a reading of  
10 the patent documents. Id. Such references are more probative than

11 expert testimony of what a person skilled in the art would believe a  
12 term means. Id.<sup>1</sup> Moreover, by contrast to expert testimony, these  
13 sources are immutable and are available to the public for

14 consultation when reading the claims of a patent. Id. Once again,  
15 however, such sources may not be used to vary claim terms from how  
16 they are defined or used in the patent or prosecution file history.

17 Id.

18 As a last resort, if after consulting all prior sources of  
19 intrinsic and extrinsic evidence a claim term is unclear, the Court  
20 may consult inventor testimony or expert testimony concerning the  
21 meaning of certain terms in the art. Vitronics Corp., 90 F.3d at  
22 1584. Such testimony may not be used to vary or contradict the

23 \_\_\_\_\_  
24 <sup>1</sup> A court in its discretion may also admit and rely on prior  
25 art literature to help demonstrate how a disputed term is used by  
26 those skilled in the art. Vitronics Corp., 90 F.3d at 1584. Such  
27 references may be more indicative than expert testimony of what a  
28 person skilled in the art would believe a term means. Id. Once  
again, however, such evidence may not be used to vary claim terms  
from how they are defined or used in the patent or prosecution file  
history. Id.

1 words of the claim. Id. Accordingly, expert testimony that is  
2 inconsistent with the specification or prosecution history must be  
3 ignored. Id. Moreover, expert testimony about the proper  
4 interpretation of claim terms amounts to no more than legal opinion  
5 and is entitled to no weight as a matter of law. Markman, 52 F.3d  
6 at 983. Such testimony should be excluded as inappropriate legal  
7 testimony. [See Defendants' Expedited Motion In Limine To Exclude  
8 Technical Expert Testimony On Legal Issues Of Claim Construction,  
9 filed September 17, 1996]

10 **C. Determinations of Patent Validity and Equivalents Are**  
11 **Not Properly At Issue In The Markman Hearing.**

12 The Markman hearing involves solely the determination of the  
13 proper interpretation of the terms of the Stanford Patent claims.  
14 The Court is not being asked to resolve issues of patent validity at  
15 the Markman hearing. [See Stipulated Order Regarding Pre-trial and  
16 Trial Schedule, entered September 5, 1996] Moreover, the Court may  
17 not vary the interpretation of patent claim terms to save otherwise  
18 invalid patent claims. In re Paulson, 30 F.3d at 1480.

19 The Court also may not resolve at this stage issues of  
20 "equivalency," either as a determination of equivalent structures  
21 under 35 U.S.C. § 112, ¶ 6 or under the doctrine of equivalents.  
22 Palumbo v. Don Joy Co., 762 F.2d 969 (Fed. Cir. 1985); Hilton Davis  
23 Chemical Co. v Warner Jenkinson Co., 62 F.3d 1512, 1522 (Fed. Cir.  
24 1995) (en banc). Both issues are questions of fact that cannot be  
25 resolved as part of the claim interpretation analysis. Id. Thus,  
26 evidence or allegations relating to those issues are simply  
27  
28



irrelevant and cannot vary the interpretation of the patent claim terms that is compelled by the objective evidence of record.<sup>2</sup>

**II. CLAIMS 1 THROUGH 5 OF THE HELLMAN/MERKLE PATENT ARE ORDINARY METHOD CLAIMS, NOT STEP PLUS FUNCTION CLAIMS.**

RSADSI has adopted the standard accused infringer's approach to claim interpretation: attempt to mislead the Court into treating the preferred example embodiment -- rather than the claims -- as the invention. RSADSI and Schlafly both argue that claims 1 through 5 of the Hellman-Merkle Patent are subject to provisions of 35 U.S.C. § 112, ¶ 6. That statute permits a patent claim drafter to draft claims as a "step for" performing a function, but limits such claims to the acts performed by the example embodiments in the patent and equivalents. While RSADSI concedes that not one of these claims contains the words "step for," RSADSI argues that the claims should be read as if they did contain those words. RSADSI does not, and cannot, cite to any legal precedent or fact that supports RSADSI's attempt to insert the words "step for" into the claims. RSADSI's argument both contravenes all applicable legal precedent and contradicts the undisputed facts.

---

<sup>2</sup> There does not appear to be any dispute that validity and equivalents issues are not properly to be raised at the Markman hearing. During depositions of RSADSI's experts, RSADSI's counsel objected to and instructed witnesses not to answer questions on those topics. RSADSI may not now introduce such topics and any reference to them should be stricken from RSADSI's Proposed Jury Instructions.



**A. Section 112 Does Not Apply To Claim Elements Unless  
The Evidence Demonstrates That They Were Intended To  
Be Expressed As A "Step For" Performing A Function.**

Paragraph 6 of section 112 of the patent law allows a patentee to claim his invention in terms of a means or step for performing a specified function:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification or equivalents thereof.

35 U.S.C. § 112, ¶ 6 (emphasis added). The statute was enacted as a compromise after the Supreme Court ruled that "means for" claims were too indefinite. Halliburton Oil Well Cementing Co. v. Walker, 329 U.S. 1, 67 S. Ct. 6 (1946). With paragraph 6 of section 112, Congress permitted the use of "means or step for" language in claims, but limited the breadth of such claim language by restricting its scope to the structure, material, or acts disclosed in the specification and equivalents thereof. Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 39 U.S.P.Q.2d 1783, 1996 U.S. App. LEXIS 20109 (Fed. Cir. 1996) (copy attached at Exh. 10 hereto).

Section 112, paragraph 6 provides that an element in a claim for a combination "may be" expressed as a "means or step for" performing a function, thus granting the patentee the option of using the "means for" or "step for" format. Greenberg, 39 U.S.P.Q.2d at 1786. The question, then, is whether, in the selection of claim language, the patentee must be taken to have exercised that option. Id.

As with any claim interpretation issue, the first stop in the determination of whether the § 112, ¶ 6 option applies to a claim is to examine the language of the claim itself. The question whether a claim element triggers § 112, ¶ 6 is ordinarily not a difficult one. Greenberg, 39 U.S.P.Q.2d at 1785. Claim drafters conventionally use the preface "means for" or "step for" when they elect to invoke § 112, ¶ 6. There is, therefore, seldom any confusion about whether § 112, ¶ 6 applies to a particular element. Id. Unless the inventors explicitly express an intent to exercise the option of § 112, ¶ 6, in traditional "means for" or "step for" language, a claim will generally be interpreted not to fall within paragraph 6 of section 112. Id.<sup>3</sup>

When the patentee does not use the traditional "means for" or "step for" language, there must be some evidence that the patentee in fact intended to exercise the option.<sup>4</sup> For example, in Greenberg the district court found the claim element "detent mechanism" to be a "means for" element because "detent" does not define a device, but rather the function of "holding one mechanical part in relation to

---

<sup>3</sup> Claim 6 of the Hellman-Merkle patent explicitly recites "means for" language, demonstrating that the inventors and their patent counsel fully understood how to invoke the provisions of 35 U.S.C. § 112, ¶ 6.

<sup>4</sup> Although the Federal Circuit recognized in Greenberg that there is "no magic language" absolutely required to invoke 35 U.S.C. § 112, ¶ 6, the Court clarified that if the claim drafter did not employ the conventional "step for" or "means for" language, the presumption is that the statute is not being invoked. The Court ruled that the presumption can be overcome only if there is some evidence that the drafter intended to invoke the statute, for example by employing terms that are indefinite. Greenberg, 39 U.S.P.Q.2d at 1786-1787. Conversely, claims using the term "means" can be interpreted not to invoke § 112, ¶ 6 if the language of the claim itself is sufficiently definite. Quantum Corp. v. Mountain Computer, 5 U.S.P.Q.2d 1103, 1108 (N.D. Cal. 1987).

another." Greenberg, 39 U.S.P.Q.2d at 1785. The Federal Circuit reversed, pointing out that use of purely functional terms does not necessarily imply an intent to invoke paragraph 6 of section 112. Greenberg, 39 U.S.P.Q.2d at 1786.

The Court in Greenberg held that the test is not solely whether the patent claim terms are expressed in purely functional terms but rather whether devices so described in functional terms bear a meaning that is generally understood in the relevant art. Id. According to the Federal Circuit, "[w]hat is important is not simply that a "detent" or "detent mechanism" is defined in terms of what it does, but that the term, as the name for structure, has a reasonably well understood meaning in the art." Id. This Court has applied the same analysis in Quantum Corp. v. Mountain Computer, 5 U.S.P.Q.2d 1103, 1108 (N.D. Cal. 1987), holding that the phrase "sample and hold circuit" must be afforded its broad common meaning and should not be restricted to example embodiments in the patent.

**B. None of The Method Claims Of The Hellman-Merkle Patent Contain "Step For" Claim Elements.**

Method claims 1 through 5 of the Hellman-Merkle Patent do not contain any "step for" claim elements.<sup>5</sup> Claims 1 through 5 recite "method" claims that contain a series of acts: "providing random numbers at the receiver; generating from said random numbers a public enciphering key at the receiver. . . ." [See Exh. 1] As is plain from simply reading the claims, the inventors did not include

---

<sup>5</sup> RSADSI has offered no jury instruction with the assertion that any claims of the Diffie-Hellman contain "step for" claim elements and thus concedes that the method claims of that patent are not subject to 35 U.S.C. § 112, ¶ 6.

1 the words "step for" in any of the claims of the Hellman-Merkle  
 2 Patent. [Id.] It is also obvious that the drafter of the Hellman-  
 3 Merkle patent understood fully how to exercise the option afforded  
 4 under 35 U.S.C. § 112, ¶ 6: claim 6 of the Hellman-Merkle Patent was  
 5 explicitly drafted with six "means for" elements that indisputably  
 6 are subject to § 112, ¶ 6. [Id.] Thus, the absence of any "step  
 7 for" or "means for" language in claims 1 through 5, combined with  
 8 the drafter's explicit use of "means for" language in claim 6,  
 9 demonstrates conclusively that the drafter did not intend to  
 10 exercise the option afforded by § 112, ¶ 6 in claims 1 through 5.  
 11 Those method claims should be treated as they are written, simple  
 12 method claims reciting acts and not "step for" claim elements  
 13 subject to § 112, ¶ 6. Greenberg, 39 U.S.P.Q.2d at 1786.

14 Nonetheless, in the past, RSADSI has argued that because the  
 15 words of claim 1 are similar to the words of claim 6, with the  
 16 exception that claim 6 introduces each phrase with the words "means  
 17 for," claims 1 through 5 must be limited by § 112, ¶ 6. In fact,  
 18 this similarity of language proves precisely the opposite. The  
 19 explicit choice of the words "means for," in claims 6 invokes the  
 20 provisions of § 112, ¶ 6. Conversely, the explicit omission of  
 21 those same words in claims 1 through 5 show that § 112, ¶ 6 was not  
 22 invoked. The explicit choice not to invoke such language clearly  
 23 shows that there was not an intention to invoke § 112, ¶ 6.<sup>6</sup>  
 24 Greenberg, 39 U.S.P.Q.2d at 1785.

25 <sup>6</sup> RSADSI's theory that Claim 1 should be construed to be  
 26 substantively identical to Claim 6 also runs afoul of the  
 27 fundamental principle of patent law that each claim is presumed to  
 28 be different: E.g., Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d  
 1044, 1054-55 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988).

(Footnote continues on following page.)

1 Because the words "step for" are not in the claims, RSADSI is  
 2 forced to argue that those terms should be implied into the elements  
 3 of the method claims of the Hellman-Merkle Patent. There is,  
 4 however, no evidence that the method claims of the Hellman-Merkle  
 5 were drafted with the intent to invoke the special statutory rule of  
 6 § 112, ¶ 6. There is nothing in the patent specification that would  
 7 suggest that the method claims should be subject to § 112, ¶ 6. In  
 8 the descriptions of the inventions contained in the Abstract and  
 9 Summary of the inventions, there is no mention of any intended  
 10 restriction upon the inventions. [Exh. 1, (Abstract and column 2,  
 11 lines 48 through 59)] Nor is there any mention of the terms "step  
 12 for" anywhere in the patent. [Exh. 1]

13 During the entire prosecution of the Hellman-Merkle Patent, the  
 14 words "step for" were never used by the applicants or the patent  
 15 office examiner. [Exh. 3] The provisions of § 112, ¶ 6 were never  
 16 mentioned at all during prosecution and the inventors never relied  
 17 upon the details of the example embodiments for any arguments to the  
 18 examiner. [Id.] Indeed, the United States Patent Office reviewed

19 \_\_\_\_\_  
 (Footnote continued from previous page)

20 Indeed, in D.M.I., Inc. v. Deere & Co., 755 F.2d 1570, 1574 (Fed.  
 21 Cir. 1985), this Court stated:

22 [t]he district court said 'as a general rule a  
 23 limitation cannot be read into a claim to avoid  
 24 infringement' . . . . Where, as here, the  
 25 limitation sought to be 'read into' a claim  
 26 already appears in another claim, the rule is  
 27 far more than 'general.' It is fixed. It is  
 28 long and well established. It enjoys an  
 immutable and universally applicable status  
 comparatively rare among rules of law. Without  
 it, the entire statutory and regulatory  
 structure governing the drafting, submission,  
 examination, allowance, and enforceability of  
 claims would crumble.

1 claims 1 through 5 of the Hellman-Merkle Patent as method claims,  
2 not as "step for" claims subject to § 112, ¶ 6, and found the claims  
3 to be definite, novel and patentable.<sup>7</sup> There is no evidence in the  
4 public record to suggest or even hint that the patentees intended  
5 Hellman-Merkle claims 1 through 5 to contain implied "step for"  
6 language that would subject the claims to 35 U.S.C. § 112, ¶ 6.

7 Nor is there any evidence that any of the claim terms are not  
8 reasonably well-understood in the relevant art. The Patent Office  
9 examiner, a person skilled in the art, found the claims to be  
10 definite and passed the claims to issue. RSADSI has not presented  
11 any testimony from any of its experts that any of the terms used in  
12 the patent claims were not reasonably well understood in the art.  
13 Indeed, as is shown in the Appendix A to defendants' Memorandum  
14 Regarding Jury Instructions filed concurrently herewith, not only is  
15 there uncontradicted evidence that the claim terms are reasonably  
16 well understood in the art, there is virtually no disagreement on  
17 what the terms mean. Thus, the only dispute among the parties is  
18 whether under the law, claim terms that are agreed to be well-  
19 understood in the art can be construed to impliedly contain the  
20 words "step for" by implication. Under the law, those words cannot  
21 be added.

22  
23  
24 <sup>7</sup> Prior to 1994, the Patent Office reviewed all claims without  
25 regard to § 112, ¶ 6 and only issued claims if the claims as written  
26 (without resort to an analysis of the purported distinguishing  
27 features of the disclosed embodiments) were definite, novel over the  
28 prior art and patentable subject matter. In re Donaldson, 16 F.3d  
1189, 1194 (Fed. Cir. 1994). In 1994, the Federal Circuit Court of  
Appeals ruled that the Patent Office must apply § 112, ¶ 6 in its  
patentability review of all "means for" and "step for" claims. Id.



1        Rather than address the existing law and undisputed facts,  
2 RSADSI apparently will rely upon an unprecedented interpretation of  
3 35 U.S.C. § 112, ¶ 6. RSADSI will argue that any method claim  
4 element recited as a single verb phrase, such as "providing random  
5 numbers at the receiver," is a "function" and not an "act" In  
6 addition to being grammatically counterintuitive, there is nothing  
7 in 35 U.S.C. § 112, ¶ 6 that supports RSADSI's assertion. RSADSI  
8 can also not point to any case law that would support its novel  
9 interpretation of 35 U.S.C. § 112, ¶ 6. Indeed, the law is all to  
10 the contrary.

11        If RSADSI's novel theory were correct, then virtually every  
12 method claim reciting a series of acts would be a "step for" claim.  
13 The courts, however, have routinely interpreted method claims of the  
14 form at issue in this case, but have never found that such claims  
15 are "step for" claims under 35 U.S.C. § 112, ¶ 6. See, e.g., Bio-  
16 Technology General Corp. v. Genentech, 80 F.3d 1553, 1558-60 (Fed.  
17 Cir. 1996) (interpreting as ordinary method claim, claim which the  
18 Federal Circuit itself described as using "broad and generic  
19 language to define the steps of isolating and purifying. . .");  
20 Lifescan, Inc. v. Home Diagnostics, Inc., 76 F.3d 358, 360-61 (Fed.  
21 Cir. 1996) (refusing to limit single-verb-phrase method elements by  
22 reference to the preferred embodiment); Laitram Corp. v. NEC Corp.,  
23 62 F.3d 1388, 1389-95 (Fed. Cir. 1995) (interpreting single-verb-  
24 phrase elements as ordinary method elements and refusing to import  
25 limitations from the specification); Genentech, Inc. v. Wellcome  
26 Foundation Ltd., 29 F.3d 1555 (Fed. Cir. 1994) (interpreting method  
27 claims not to be limited by preferred embodiment); Arrhythmia  
28 Research Technology, Inc. v. Corazonix Corp., 958 F.2d 1053, 1055,



1 1058-61 (Fed. Cir. 1992) (holding method claims drawn to patentable  
 2 subject matter without reference to § 112, ¶ 6 although court  
 3 treated § 112, ¶ 6 with regard to apparatus claims drafted in  
 4 explicit means plus function format); Shamrock Technologies, Inc. v.  
 5 Medical Sterilization, Inc., 903 F.2d 789, 791-93 (Fed. Cir. 1990)  
 6 (affirming summary judgment of infringement of method claim without  
 7 reference to § 112, ¶ 6); Intervet Am. Inc. v. Kee-Vet Labs., Inc.,  
 8 887 F.2d 1050, 1052-56 (Fed. Cir. 1989) (construing single-verb-  
 9 phrase method claim without reference to § 112, ¶ 6); Moleculon  
 10 Research Corp v. CBS, Inc., 793 F.2d 1261, 1263-64, 1271-73 (Fed.  
 11 Cir. 1986), cert. denied, 479 U.S. 1030 (1987) (interpreting method  
 12 claims without reference to § 112, ¶ 6). As demonstrated in  
 13 Appendix A hereto, which is a list of exemplary method claims that  
 14 have been interpreted by the Federal Circuit Court of Appeals, the  
 15 Federal Circuit has never implied the words "step for" into any  
 16 method claim, even where that claim would otherwise be invalid.

17 The Federal Circuit's treatment of the claim at issue in  
 18 Arrhythmia Research Technology is instructive.<sup>8</sup> The court analyzed  
 19 \_\_\_\_\_

20 <sup>8</sup> Claim 1 of the patent at issue in Arrhythmia Research  
 21 Technology, 958 F.2d at 1055, reads:

22 1. A method for analyzing electrocardiograph  
 23 signals to determine the presence or absence of a  
 predetermined level of high frequency energy in the late  
 QRS signal, comprising the steps of:

24 converting a series of QRS signals to time  
 25 segments, each segment having a digital value  
 equivalent to the analog value of said signal  
 at said time;

26  
 27 applying a portion of said time segments in reverse  
 time order to high pass filter means;

28 (Footnote continues on following page.)

whether the claimed method steps were within the scope of statutory subject matter without any reference to § 112, ¶ 6. Arrhythmia Research Technology, 958 F.2d at 1058-60. The court analyzed the claimed method steps of "converting," "applying," "determining," and "comparing" without reference to any acts from the specification. Id. The Court determined that the steps were statutory because they were physical process steps that transformed one physical electrical signal into another. In marked contrast, the court used § 112, ¶ 6 to interpret a set of apparatus claims that the drafter had explicitly written in "means for" format. Arrhythmia Research Technology, 958 F.2d at 1060-61. The Federal Circuit had no difficulty finding that, although the method claim was recited as a series of single-verb phrases, the Arrhythmia method claim was just that -- a simple method claim and not a "step for" claim.

In fact, when faced with method claim elements, the Federal Circuit has uniformly held that it is legal error to import aspects of the example embodiments in the patent specification into the method claims. See, e.g., Lifescan, Inc. v. Home Diagnostics, Inc., 76 F.3d 358, 360-61 (Fed. Cir. 1996) (refusing to limit single-verb-phrase method elements by reference to the preferred embodiment); Intervet Am. Inc. v. Kee-Vet Labs., Inc., 887 F.2d 1050, 1054-55 (Fed. Cir. 1989); Polaroid Corp. v. Eastman Kodak Co., 789 F.2d 1556, 1562 (Fed. Cir.), cert. denied, 479 U.S. 850 (1986) ("apparatus distinctions not claimed are not controlling in

---

(Footnote continued from previous page)

determining an arithmetic value of the amplitude of the output of said filter; and

comparing said value with said predetermined level.

determining infringement of process claims"); Fromson v. Advance Offset Plate, Inc., 720 F.2d 1565, 1568 (Fed. Cir. 1983) ("[W]e caution that the asserted claims contain no temperature or time limitations, and that no basis appears on the record for limiting the claimed inventions to preferred embodiments or specific examples in the specification.").

In Intervet Am. Inc.,<sup>9</sup> the Federal Circuit reiterated that

courts cannot alter what the patentee has chosen to claim as his invention, that limitations appearing in the specification will not be read into claims, and that interpreting what is meant by a word in a claim "is not to be confused with adding an extraneous limitation appearing in the specification, which is improper."

887 F.2d at 1053 (citations omitted).

Method claims 1 through 5 of the Hellman-Merkle patent do not contain "step for" claim elements subject to 35 U.S.C. § 112, ¶ 6. There is no evidence that would authorize or permit the Court to imply that the drafter intended to include the words "step for" in

---

<sup>9</sup> Just as in this case, the method claim in Intervet, 887 F.2d at 1052, recited a series of steps:

In a method for the preparation of a live vaccine that protects poultry against Infectious Bursal Disease virus which comprises: a. growing an Infectious Bursal Disease virus on a culture medium selected from the group consisting of embryonated eggs, chicken embryo cells, a culture of bursal cells and newborn mice, b. subsequently arresting the cultivated virus material, and c. subjecting the material obtained from step b. to at least one of the following treatments: i. clarifying by centrifugation and/or filtration; ii. adding a stabilizing agent; iii. putting the material in a vessel; iv. freeze-drying, the improvement comprising that the Infectious Bursal Disease virus grown in step a. is the virus of the strain deposited in the ATCC under No. VR-2041.

1 the claims. Claims 1 through 5 mean what they say -- nothing more  
2 and nothing less.

3 **III. CONCLUSION.**

4 The Court must examine the objective evidence of record to  
5 interpret the claims of the Stanford Patents. RSADSI's main  
6 premise, underscored throughout its Proposed Jury Instructions, is  
7 flawed: the method claims of the Hellman-Merkle Patent were never  
8 intended to be covered by the option provided under 35 U.S.C. § 112,  
9 ¶ 6. There is no fact or legal precedent to support such a claim  
10 construction.

11 Dated: September 24, 1996

12 MORRISON & FOERSTER LLP  
13 ALSTON & BIRD

14 By:   
15

Karl J. Kramer

16 Attorneys for Defendants and  
17 Counter-Claimants CYLINK  
18 CORPORATION, CARO-KANN  
19 CORPORATION AND THE BOARD OF  
20 TRUSTEES OF THE LELAND STANFORD  
21 JUNIOR UNIVERSITY  
22  
23  
24  
25  
26  
27  
28

A

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576 (Fed. Cir. 1996).

Method claim:

1. A method for reflow soldering of surface mounted devices to a printed circuit board comprising:

moving a printed circuit board having solder and devices disposed on a surface thereof through a first zone and in close proximity to a first emitting surface of at least one nonfocused infrared panel emitter, said first emitting surface being at a first panel temperature;

moving said board through a second zone and in close proximity to a second emitting surface of at least one nonfocused infrared panel emitter, said second emitting surface being at a second panel temperature lower than said first panel temperature; and

moving said board through a third zone and in close proximity to a third emitting surface of at least one nonfocused infrared panel emitter, said third emitting surface being at a third panel temperature higher than said second panel temperature, said third emitting surface heating said board and said solder to a solder reflow temperature for a period of time sufficient to cause said solder to reflow and solder said devices to said board while maintaining the temperature of said devices below said solder reflow temperature.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Texas Instruments, Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558 (Fed. Cir. 1996).

Representative method claim:

14. A process for encapsulating a semiconductor device comprising:

providing electrical connections [52 and 54] between electrical terminals of the device and a plurality of conductors [10, 12, and 14] arranged in a substantially common plane, said device [40] and the thusly provided electrical connections [52 and 54] thereto being disposed on one side of said plane,

disposing the device and portions of the conductors in a mold cavity [64 and 66], and

holding the conductors [10, 12, and 14] while injecting a fluid insulating material into the mold cavity for subsequently solidifying and embedding said device,

the fluid insulating material being injected into a portion of the cavity on the opposite side of said plane [88] to preclude direct high velocity engagement between the fluid and the device [40] and the electrical connections [52 and 54] thereto.



**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Litton Sys., Inc. v. Honeywell, Inc.*, 87 F.3d 1559 (Fed. Cir. 1996).

Method Claim:

1. A method of fabricating multiple layer optical films, said multiple layer optical films comprising optical layers having different indices of refraction comprising:

bombarding targets obliquely with an ion beam produced by or derived from a Kaufman-type ion beam source in a vacuum chamber to sputter deposit a plurality of optical film layers on a base;

controlling the atmosphere inside the vacuum chamber to provide sufficient gas to sustain the ion beam and the proper amount of oxygen to accomplish proper stoichiometry of the thin films; and

depositing multiple layers of different materials on said base by varying the targets being bombarded by the ion beam; and

continuously rotating said base during the deposition of said multiple optical layers.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Bio-technology Gen. Corp. v. Genentech, Inc.*, 80 F.3d 1553 (Fed. Cir. 1996).

Method claim:

2. A method for producing human growth hormone which method comprises [1] culturing bacterial transformants containing recombinant plasmids which will, in a transformant bacterium, express a gene for human growth hormone unaccompanied by the leader sequence of human growth hormone or other extraneous protein bound thereto, and [2] isolating and purifying said expressed human growth hormone.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Lifescan, Inc. v. Home Diagnostics, Inc.*, 76 F.3d 358 (Fed. Cir. 1996).

**Method Claim:**

1. A method of causing an analytical measurement to be made in a reflectance-reading device at the end of a predetermined time period after an analyte reacts with a reagent in a porous, reflectance-reading matrix located in said device, which comprises:

taking a first reflectance reading from a dry first surface of said porous matrix prior to application of a sample of body fluid suspected of containing said analyte to a second surface of said porous matrix from which said sample can travel to said first surface by capillary action and react with said reagent in said porous matrix if said analyte is present in said sample;

applying said sample to said second surface of said porous matrix;

taking an additional reflectance reading from said first surface after said sample is applied to said porous matrix;

comparing said additional reflectance reading to said first reflectance reading;

initiating said predetermined time period upon a predetermined drop in reflectance sufficient to indicate that said sample has reached said first surface; and

taking a measurement reflectance reading at the end of said predetermined time period without having determined the time at which said sample was initially applied to said porous matrix.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Lateral Corp. v. NEC Corp.*, 62 F.3d 1388 (Fed. Cir. 1995).

Method claim:

2. A method of electro-optically printing type quality alpha-numeric characters at high speed on the recording surface of a photosensitive material, said method comprising the steps of:

arranging a plurality of rapidly reacting radiation emitters in a straight line array, each of the said emitters being capable of emitting radiation at wavelengths to which said photosensitive material is sensitive,

selectively energizing for predetermined periods of time each of the said emitters,

transmitting the emitted radiation from each of the said emitters to a different area on said surface,

providing relative movement along a single coordinate substantially perpendicular to said array at substantially constant speed between said recording surface and said emitters, and

coordinating the predetermined periods of time in which each of said plurality of emitters is selectively energized with said constant speed of said relative movement between said emitters and recording surface so that the alpha-numeric character images are recorded on said recording surface by exposure of selected areas of said recording surface by said emitted radiation, said step of coordinating including the steps of synchronously generating a first data signal which programs the order of energization of said emitters and a second data signal which determines the duration of the energization period of said emitters, and employing said first and second data signals to effect energization of said emitters so as to record said alpha-numeric character images of said type quality at said high speed.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*In re Warmerdam*, 33 F.3d 1354 (Fed. Cir. 1994).

Representative method claims:

1. A method for generating a data structure which represents the shape of [a] physical object in a position and/or motion control machine as a hierarchy of bubbles, comprising the steps of: first locating the medial axis of the object and then creating a hierarchy of bubbles on the medial axis.

2. The method of Claim 1 wherein the step of creating the hierarchy comprises a top-down procedure of:

first placing a root bubble which is centered at the center of gravity of the object and has a radius equal to the maximum distance from the center of gravity to the contour of the object;

next, if the medial axis has a plurality of branch lines, placing a plurality of first successive bubbles each of which encompasses a distinct part of the object which is described by one of said branch lines; and

then successively dividing each line of the medial axis into two new line parts and placing a pair of next successive bubbles each of which encompasses a distinct part of the object which is described by one of said new line parts.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Genentech, Inc. v. Wellcome Found. Ltd.*, 29 F.3d 1555 (Fed. Cir. 1994).

Method claims:

1. A process which comprises expressing a DNA sequence encoding human tissue plasminogen activator in a recombinant host cell, said recombinant host cell being a microorganism or cell culture transformed with an expression vector containing said DNA sequence.

8. A process for producing recombinant human tissue plasminogen activator comprising:

(a) growing recombinant cells in a growth medium, said cells being a microorganism or cell culture transformed with an expression vector containing DNA encoding human tissue plasminogen activator; and

(b) simultaneously expressing said DNA, thereby producing recombinant human tissue plasminogen activator.

12. A process for producing recombinant human tissue plasminogen activator comprising:

(a) transforming a microorganism or cell culture with a replicable vector containing DNA encoding human tissue plasminogen activator; and

(b) expressing said DNA in said transformed microorganism or cell culture.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Atlantic Thermoplastics Co., Inc. v. Faytex Corp.*, 970 F.2d 834 (Fed. Cir. 1992).

Method claim:

1. In a method of manufacturing a shock-absorbing, molded innersole for insertion in footwear, which method comprises:

(a) introducing an expandable, polyurethane into a mold; and

(b) recovering from the mold an innersole which comprises a contoured heel and arch section composed of a substantially open-celled polyurethane foam material, the improvement which comprises:

(i) placing an elastomeric insert material into the mold, the insert material having greater shock-absorbing properties and being less resilient than the molded, open-celled polyurethane foam material, and the insert material having sufficient surface tack to remain in the placed position in the mold on the introduction of the expandable polyurethane material so as to permit the expandable polyurethane material to expand about the insert material without displacement of the insert material; and

(ii) recovering a molded innersole with the insert material having a tacky surface forming a part of the exposed bottom surface of the recovered innersole.



**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Arrhythmia Research Technology, Inc. v. Corazonix Corp.*, 958 F.2d 1053 (Fed. Cir. 1992).

Method claim:

1. A method for analyzing electrocardiograph signals to determine the presence or absence of a predetermined level of high frequency energy in the late QRS signal, comprising the steps of:

converting a series of QRS signals to time segments, each segment having a digital value equivalent to the analog value of said signals at said time;

applying a portion of said time segments in reverse time order to high pass filter means;

determining an arithmetic value of the amplitude of the output of said filter; and

comparing said value with said predetermined level.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Standard Havens Prods. v. Gencor Indus.*, 953 F.2d 1360 (Fed. Cir. 1991).

Representative method claim:

1. A method for continuously producing an asphaltic composition from asphalt and aggregates, the steps of said method comprising:

introducing aggregate material interiorly of a first end of an inclined, horizontal rotating drum to flow generally from said first end to the second end of said drum;

generating a hot gas stream within said drum to flow through said drum to said first end in countercurrent relation to said aggregate material;

isolating a zone of said rotating drum from said hot gas stream;

delivering said heated and dried aggregate material to said zone isolated from said hot gas stream;

mixing said aggregate material with liquid asphalt within said zone isolated from said hot gas stream to produce an asphaltic composition; and

discharging said asphaltic composition from said rotating drum.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Shamrock Technologies v. Medical Sterilization*, 903 F.2d 789 (Fed. Cir. 1990).

Method claim:

1. A method for processing flowable solid polytetrafluoroethylene material by radiation, to degrade said material to lower its molecular weight and render it grindable into a powder, comprising

- (a) supplying said material to a processing vessel,
- (b) supplying radiation to a selected region of said processing vessel,
- (c) agitating said material in said processing vessel during said processing thereby to repeatedly move said material into and out of said selected region whereby said material is uniformly irradiated, and,
- (d) cooling said material to maintain a temperature below 500° F. during said processing.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Intervet Am. v. Kee-Vet Labs.*, 887 F.2d 1050 (Fed. Cir. 1989).

Method claim:

7. In a method for the preparation of a live vaccine that protects poultry against Infectious Bursal Disease virus which comprises:

- a. growing an Infectious Bursal Disease virus on a culture medium selected from the group consisting of embryonated eggs, chicken embryo cells, a culture of bursal cells and newborn mice,
- b. subsequently arresting the cultivated virus material, and
- c. subjecting the material obtained from step b. to at least one of the following treatments:
  - i. clarifying by centrifugation and/or filtration;
  - ii. adding a stabilizing agent;
  - iii. putting the material in a vessel;
  - iv. freeze-drying,

The improvement comprising that the Infectious Bursal Disease virus grown in step a. is the virus of the strain deposited in the ATCC under No. VR-2041.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Fonar Corp. v. Johnson & Johnson*, 821 F.2d 627 (Fed. Cir. 1987).

Representative method claim:

1. A method for detecting cancer comprising:
  - a. measuring and establishing standard NMR spin-lattice relaxation times and spin-spin relaxation times for both normal and cancerous tissue of the type under analysis using as an indicator nuclei at least one nuclei which exhibits deviant behavior in cancerous tissue;
  - b. measuring the NMR spin-lattice relaxation times and spin-spin relaxation times for the suspected tissue to determine the extent of deviant behavior of the indicator nuclei; and
  - c. comparing the values obtained in (b) against the standards obtained in (a).

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261 (Fed. Cir. 1986).

Representative method claim:

3. A method for restoring a preselected pattern from sets of pieces which pieces have constantly exposed and constantly nonexposed surfaces, the exposed surfaces adapted to be combined to form the preselected pattern, which sets when in random engagement fail to display said preselected pattern which comprises:

- a. engaging eight cube pieces as a composite cube;
- b. rotating a first set of cube pieces comprising four cubes about a first axis;
- c. rotating a second set of four cubes about a second axis; and
- d. repeating steps (b) and (c) until the preselected pattern is achieved.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Polaroid Corp. v. Eastman Kodak Co.*, 789 F.2d 1556 (Fed. Cir. 1986).

Method claim:

1. In a process of forming color transfer images wherein a photosensitive element is exposed, an alkaline processing composition is applied to said photosensitive element to effect development thereof and imagewise diffusion transfer of a dye image-forming substance from said photosensitive element to an image-receiving layer in superposed relationship therewith to form a positive dye image, the improvement wherein said photosensitive element contains a layer of a nondiffusible polymeric acid positioned between the support and the innermost layer containing said dye image-forming substance, said layer containing said polymeric acid containing sufficient acid groups to effect a reduction in the pH of the surface of said image-receiving layer of at least 2 pH units, as compared with the initial pH of said alkaline processing composition, prior to completion of the inhibition period.

**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*Fromson v. Advance Offset Plate, Inc.*, 720 F.2d 1565 (Fed. Cir. 1983).

**Method Claim:**

12. The process of making a sensitized photographic plate comprising the steps of applying to an aluminum sheet having a coating of aluminum oxide, a water-solution of an alkali metal silicate to cause the silicate to react with the aluminum oxide to form a water-insoluble, hydrophilic, organophobic layer on said sheet, drying the layer, and applying over the dry layer a light-sensitive coating having one solubility in relation to a solvent in a state before exposure to light and another solubility in relation to said solvent in another state after exposure to light, said light-sensitive material being soluble in said solvent in one of said states and being insoluble in said solvent and in water, hydrophobic and organophilic in its other state.



**APPENDIX A:**

**Cases Construing Method Claims Without Resort to Section 112(6)**

*In re Arbeit*, 206 F.2d 947 (C.C.P.A. 1953).

Method claim:

33. The method of manufacturing glass that includes the steps of melting, fining and working the glass, the glass proceeding from a melting zone to a fining zone to a working zone and being withdrawn from the working zone, fining the glass by Joule effect, and flowing the glass from zone to zone in small, submerged streams impermeable to wandering currents in the zones, said streams constituting the sole connections between the zones.